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**AGO ltr dtd 29 Apr 1980**

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DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

(1)

IN REPLY REFER TO

AGAM-P (M) (27 Nov 67) FOR OT RD 670581      7 December 1967

SUBJECT: Operational Reports--Lessons Learned, Headquarters, 62d  
Engineer Battalion (Construction), Period Ending 31 July 1967

TO: SEE DISTRIBUTION

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2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

*Kenneth G. Wickham*

KENNETH G. WICKHAM  
Major General, USA  
The Adjutant General

1 Incl  
as

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21

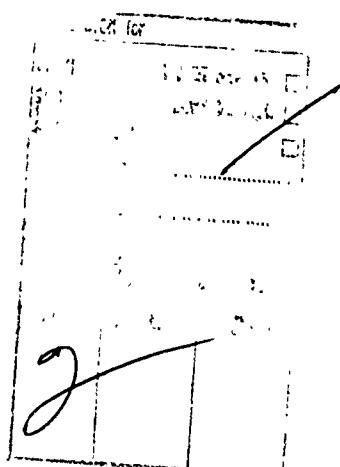
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DEPARTMENT OF THE ARMY  
HEADQUARTERS  
62ND ENGINEER BATTALION (CONSTRUCTION)  
APO 96491

RGBC-3

31 July 1967

SUBJECT: Operational Report-Lessons Learned (RCS CSPOR-65) for Quarterly Period Ending 31 July 1967

THRU: Commanding Officer  
159th Engineer Group (Const)  
APO 96491

Commanding General  
USA Engineer Command Vietnam (Prov)  
ATTN: AVCC-P&O  
APO 96491

Commanding General  
United States Army, Vietnam  
ATTN: AVHOC-DH  
APO 96307

Commander in Chief  
United States Army, Pacific  
ATTN: GPOP-OT  
APO 96588

TO: Assistant Chief of Staff for Force Development  
Department of the Army (ACSFOR DA),  
Washington, D.C. 20310

**SECTION 1, SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES**

**1. COMMAND:**

a. UNIT EMPLOYMENT: The 62d Engineer Battalion (Construction) is located in the Long Binh Complex, Republic of South Vietnam. The Battalion was commanded by LTC Andrew J. Waldrop until 1 June 1967 at which time he departed Vietnam on PCS to CONUS. LTC Robert E. Crowley assumed command on that same date.

b. MISSION: The mission of the 62d Engineer Battalion (Construction) during this period was commensurate with the mission of a Construction Battalion as stated in TOE 5-115E.

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**SECTION 1. SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)**

c. AREA OF RESPONSIBILITY: Responsibility for construction support includes portions of Long Binh Post, the Bien Hoa Complex, and the Siagon Military District Area.

d. ATTACHMENTS OR DETACHMENTS: The 143d Engineer Detachment HO (Concrete Mixing and Paving) is attached to the Battalion and is under the operational control of A Company. The unit is organized under TOE 5-500C 57 W/C 22 (TOE 300-32) with an authorized strength of 27 Officers and EM.

**2. PERSONNEL, ADMINISTRATION, MORALE, AND DISCIPLINE:**

The Battalion was reorganized from the Delta Series to the Echo Series TOE in June 1967.

The personnel strength of the 62d Engineer Battalion (Construction) and attached unit was as follows:

<u>31 May 1967</u>	<u>OFF</u>	<u>WO</u>	<u>EM</u>	<u>TOTAL</u>
Authorized:	35	8	877	920
Assigned:	31	8	1042	1081

<u>30 June 1967</u>	<u>OFF</u>	<u>WO</u>	<u>EM</u>	<u>TOTAL</u>
Authorized:	32	7	893	932
Assigned:	29	7	1019	1055

<u>31 July 1967</u>	<u>OFF</u>	<u>WO</u>	<u>EM</u>	<u>TOTAL</u>
Authorized:	32	7	893	932
Assigned:	28	7	909	944

The overall strength during this period has been very good but there is, and has been, a critical shortage of NCOs grades E-6 and E-7. There are also critical MOS shortages in the following areas: Surveyor 82B20, Electrician 52F20, Plumber 51K20, and Mason 51D20. At the present time the Battalion has assigned none of the authorized 36 electricians 52F20. To cope with these MOS shortages an extensive OJT training program is being initiated.

There have been 27 extensions of tours of duty in Vietnam for this reporting period. These extensions continue to provide the Battalion with well trained and experienced personnel.

The 62d Engineer Battalion (Construction) received an average of 63 Rest and Relaxation leaves each month. All of these leaves were utilized by the Battalion. If additional incountry quotas to the R & R center at Vung Tau were available, they could easily be utilized. The Battalion received an average of 4 R & R leaves to Vung Tau each month.

-2-

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SECTION I. SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)

5  
Morale within the Battalion remained high during the reporting period. Several special floor shows provided by the Sundry Fund, the showing of free movies six nights per week and a recreation program supplemented with half a day off during the week for each EM has sustained a high esprit de corps. Command emphasis has been given to good working and living conditions. All men in the Battalion are now living in aluminum ADAMS Huts.

Disciplinary problems have been minimal during the reporting period. Extensive work on a two shift basis, Battalion Area recreational facilities, and attention to personnel problems at the unit level have been instrumental in keeping disciplinary problems at a low rate. The Battalion had four (4) special courts martials, no summary courts martials, and 73 article 15's during the reporting period.

**AWARDS AND VISITS:**

During the reporting period, men of the Battalion have been awarded six (6) Bronze Star Medals and five (5) Army Commendation Medals for meritorious service by United States Army Engineer Command Vietnam (Prov).

The 62d Engineer Battalion (Construction) was visited by Major General Ploeger on 31 July 1967.

**3. INTELLIGENCE AND COUNTERINTELLIGENCE:**

The combat intelligence functions of the Battalion have been relatively minor due to the primary emphasis on construction in relatively secure areas. Battalion intelligence has been restricted primarily to analysis of project sites to improve design or construction. Intelligence information is obtained on a daily basis from Second Field Force Vietnam (SFFV) SITREP.

**4. OPERATIONS AND TRAINING:**

a. COMBAT SUPPORT: This Battalion supported the 15th Engineer Battalion (Combat) with one (1) Rome Plow and one (1) 5 ton tractor with 25 ton trailer for the period 6 June 1967 through 31 July 1967.

On 19 July 1967 this unit received a directive to make and stock 15 foot and 20 foot precast, reinforced, concrete bridge beams. These beams are to be used to replace substandard, short span bridges and culverts. The beams will be used by the 159th Engineer Group (Construction) for LOC upgrading projects.

b. TRAINING: Training was conducted during this period on Sunday mornings. Mandatory DA and USARV Subjects were presented during these two (2) hour training periods.

c. CONSTRUCTION OPERATIONS: During this reporting period the Battalion was actively engaged in construction activities 86 days.

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**SECTION 1, SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)**

6  
Weather throughout this reporting period has been generally fair to poor. The following amounts of precipitation were recorded during the period: May - 11.6 inches, June - 12 inches, July - 19.5 inches. The weather considerably slowed down horizontal construction but only caused minor delays on vertical construction.

**d. PROJECTS AND RELATED ACTIVITIES:**

**(1) Projects completed this period:**

(a) PK Storage Depot, Command Directive 43-201-01-T-6S. Work was completed on 3 May 1967. The project included 21,872 sq yds of hardstand, 21,430 sq yds of untreated roads and 4,516 linear feet of triple concertina security fence.

(b) IIFFV Headquarters Extension, Command Directive 43-218-14-T-6S. The project was completed 3 May 1967. It includes two offices (20' x 28' and 20' x 32') constructed of round wall quonsets.

(c) TOC Extension IIFFV, Command Directive 43-211-01-T-6S. Project was completed 3 May 1967. It included construction of two (2) buildings, 20' x 60' using round wall quonsets.

(d) Water Processing, Storage, and Distribution, Group Directive 159-70. Project was completed 3 May 1967. It included an 8' x 10' tropical frame pump house, truck fill stand, and a 3000 BBL storage tank.

(e) Security Lighting Facilities - Newport, Command Directive 73-204-05-T-6S. Project was completed 19 July 1967. The project consisted of the installation of 4020 linear feet of wiring, 160 ea 300W lamps, and 104 ea 750W flood lights under the Newport dock facilities.

(f) Retail Fuel Truck Park, Command Directive 43-212-06-T-6S. Project was completed 15 June 1967. Project included 4210 feet of untreated road and 37,875 sq yds of hardstand for drum storage.

(g) Dial Central Office, 18th Brigade Directive 66-128C-159. The project was completed on 3 July 1967. It included construction of a 40' x 130' wood frame, air conditioned, dial central building.

(h) Long Binh POL Facilities, Command Directive 43-207-06-T-6S. The Battalion was assisted by the 643d Engineer Company (Pipe line) on this project. The Project was not completed by this unit but was transferred to the 92d Engineer Battalion (Construction) on 15 June 1967. At the time of the transfer the project was 40% complete and included seven (?) 10,000 BBL storage tanks and 30,000 feet of six (6) inch pipe line.

(2) The following projects are under construction during this reporting period in the Long Binh and Siagon Military District Areas:

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### SECTION 1, SIGNIFICANT ORGANIZATION OF UNIT ACTIVITIES (CONT'D)

7  
(a) Laterite Pit Operation. During this reporting period 470,720 cu yds of laterite were issued to units in the Long Binh Area.

(b) Batch Plant Operation, Group Directive 159-95. The 143d Engineer Detachment HQ (CM&P) became fully operational on 27 June 1967. During this period 1910 cu yds of concrete have been issued to units in the Long Binh Area.

(c) Mess Hall Construction, Group Directive 159-78. During this period one 500 man mess hall was completed in the 3d Ord Bn Cantlement Area and one 750 man mess hall is under construction at the 93d Evac Hospital. The 750 man mess hall is 91 percent completed.

(d) Water Processing, Storage, and Distribution, Group Directive 159-80. This project includes an 8' x 10' tropical wood frame pump house, truck fill stand, and a 21,000 gal storage tank. The project is 90 percent complete.

(e) Water Processing, Storage, and Distribution, Group Directive 159-81. This project includes an 8' x 10' tropical wood frame pump house, truck fill stand, and a 42,000 gal storage tank. The project is 66 percent complete.

(f) Heliport Construction, Command Directive 43-214-22-T-6S. This project consists of the USARV Heliport at Long Binh with parking area, hoverway and runway facilities for 77 UH-1 helicopters and 12 CH-47 helicopters. The project is 31 percent complete.

(g) Aviation Support Facility, Command Directive 43-217-03-T-6S. This project includes the maintenance facilities, storage facilities, and operations facilities for the USARV Heliport at Long Binh. The project is 12 percent complete.

(h) General Officers Quarters, Command Directive 43-222-01-T-6S(B). This project includes construction of 11 General Quarters for USARV HQ at Long Binh Post, water distribution system and water borne sewage system and construction of an access road. The project is 40 percent complete.

(i) Double Surface Treatment of Highway 317, Command Directive 43-228-15-T-MA. This project consists of upgrading 3.5 miles of Highway 317 to MACV standard and surfacing with a double surface treatment. The project is 67 percent complete.

(j) Long Binh Post Amphitheater, Command Directive 43-229-01-T-6S. This project consists of constructing a 3,000 seat amphitheater using existing terrain, erection of a 30' x 70' stage, and construction of a 20' x 50' wood frame dressing room. The project is 70 percent complete.

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### SECTION 1, SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)

(k) Erosion Control USARV HQ, Command Directive 43-254-01-T-MA. This project consists of reshaping the slope north and west of USARV Headquarters to form 100 foot wide terraces to prevent erosion of the slopes. The project is 77 percent complete.

(l) Map Depot Expansion, Command Directive 43-249-10-T-MA. This project consists of constructing two (2) 20' x 110' extensions to an existing fabricated metal storage warehouse. The project is 90 percent complete.

(m) USAID Generator, Command Directive 73-211-01-T-MA. This project consists of site preparation and construction of five (5) each 10' x 60' generator pads and security fencing for the Khanh Hoi Power Plant in Saigon. The project is 95 percent complete.

e. With the projects presently assigned to this Battalion the unit will have enough horizontal and vertical construction for full commitment through the month of November 1967.

#### 5. LOGISTICS:

In general, logistical support on construction materials has been good during this reporting period. Support from the 159th Engineer Group (Construction) in assisting the Battalion has been very satisfactory. Assistance given by the Battalion S-4 to line companies has been instrumental in preventing the serious stoppage of projects for long periods of time.

The following materials have continually been in short supply and hindering timely completion of projects: light fixtures (both porcelain, incandescent, and fluorescent), toggle switches, corrugated galvanized metal roofing, and ceiling fans.

In the construction of the Battalion Cantorment area and the USARV Heliport Facilities prefabricated metal buildings were used. When received, many of the buildings were missing parts or contained damaged parts. In the case of the 20' x 48' Pascoe Building, extensive fabrication of parts was required to complete the building.

Requirements for construction materials such as ceramic tile, stainless steel sinks, ornamental light fixtures, and cast iron bell and spigot pipe which were not in the supply system caused many problems in support of General Officers Quarters construction. The prime difficulty was the fact that many of these items required special procurement from CONUS. Many of these items did not arrive at the required time, which resulted in substitution of items, interruption of construction, and eventual replacement of some substituted materials when the items finally arrived. Much of the problem can be attributed to an inadequate lead time having been provided for special procurement.

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**SECTION I, SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)**

9  
The unit's shortage of items of TOE Equipment considerably hinders the accomplishment of its mission. The below listed items have been due out to this organization for over ninety days:

<u>FSN</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
3431-287-5464	Welding Shop	2
3220-270-8630	Shop Equipment, Wood Working	2
3825-629-5901	Distributer, water, 1000 gal	2
3820-950-8584	Pneumatic tool and compressor outfit, 250 cfm, trailer mounted	5
3805-197-418	Grader, motorized	1
3810-188-7060	Crane shovel 10 ton	2
3810-542-4982	Crane, Truck mounted 20 ton	1
3805-542-3054	Intrenching machine	1
3895-221-1632	Roller, motorized 5-8 ton	1

Both the Battalion S-4 and the 142d Engineer Detachment HQ (CM&F) handle large amounts of bulk materials. This unit for example, handled nearly 500,000 board feet of lumber and 3600 bags of cement during a 30 day period. The 142d Engineer Detachment currently handles an average of 600 bags of cement per day, and the anticipated future demand is 1500 bags per day. At present, all these materials are being handled by cranes, a critical piece of construction equipment.

**6. MAINTENANCE:**

The maintenance program has improved during this period. The deadline rate of critical construction items dropped from 12.5% to 7.3% and the overall deadline rate dropped from 7.6% to 5.1%.

The flow of repair parts has improved, partially due to improved red ball handling procedure and increased stocks on hand at DSU level. However, a large portion of equipment deadline time is still caused by lack of repair parts.

**7. FORCE DEVELOPMENT:**

The 62d Engineer Battalion (Construction) is in the process of organizing a consolidated electrical team. The team will be composed of the Battalion personnel knowledgeable in electrical wiring and supplemented by QFT electricians. The consolidated team will be placed under the operational control of one of the construction companies and will

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### SECTION 1, SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES (CONT'D)

be responsible for the electrical wiring on all projects assigned to the Battalion. This consolidated team will enable the Battalion to initiate its OJT program and still continue to perform its construction mission. Each team will consist of at least one (1) trained electrician and two (2) OJ Trainees.

#### 8. COMMAND MANAGEMENT:

An operations meeting is held daily with the Battalion and company operations personnel to cover the day's activities, schedule the following days work, and allocate equipment resources to each company.

Staff meetings of commanders and staff sections are held twice a week to cover all aspects of the Battalion activities.

#### 9. INSPECTOR GENERAL:

The Battalion has an acting Inspector General for the purpose of receiving and processing complaints. Complaints have been minimal during this period. No inspections were conducted during the reporting period.

#### 10. INFORMATION:

Information activities of the Battalion were primarily focused on home town news releases and feature stories of local construction activities. Continuous emphasis was placed on photographic coverage. The photographs are used for special reports and project files, as well as for news releases.

#### 11. CIVIC AFFAIRS:

During this period the chaplain distributed 656 pounds of used clothing to the War Orphans Center, 401 pounds of clothing to Vien Giac School in Tam Hiep, and 500 bars of soap and 53 dental care kits in the Bien Hoa area.

### SECTION 2, PART I, OBSERVATIONS (LESSONS LEARNED)

#### ITEM: Use of Waste Asphalt for Backfill Material

DISCUSSION: In order to maintain progress on the construction of Outer-Ring Road, it was necessary to span approximately 25 feet of stream bed. Studies of the situation ruled out bridging and it was decided to use two (2) 72-inch culverts to span the gap and accomodate the flow of water at the site.

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### SECTION 2, PART I, OBSERVATIONS (LESSONS LEARNED) (CONT'D)

An investigation revealed that the top 10-foot layer of the stream bed consisted of a fine sand and "muck". An attempt was made to stabilize this soil with laterite boulders and shell cannisters. The results, however, were unsatisfactory because of an insufficient supply of both materials. Furthermore, the constant flow of water prevented the use of loose laterite.

Next, the muck and sand were removed and waste asphalt was used to replace them. A D7E was used as compactive effort on the asphalt, and when the asphalt was compacted to the level of the original stream bed, the culverts were placed. Following the placement of the culverts, additional asphalt was placed, finally forming a cradle for the culvert that was one-third the height of the culvert. A 40-pound pneumatic hammer was used to compact the asphalt around the culverts. Laterite was used to complete the backfill operations.

OBSERVATIONS: The use of waste asphalt proved to be an excellent solution for backfilling an area subject to frequent flow of water. Its relative impermeability and resistance to weathering, as well as its pliability, permits its use in many different areas.

The major problem which was encountered in this application was hardening of the asphalt. However, this problem was solved through use of a D7E to break up hardened sections of the asphalt.

#### ITEM: Weather-Proofing of Cupolas

DISCUSSION: The cupolas of the General Officers Quarters are of louvered, tropical construction. Normal construction procedures call for the placing of screen prior to the placement of the louvers. However, this type of construction proved inadequate in preventing rain from entering the building.

In an effort to rectify this situation, plastic screen was used in the place of normal screen cloth. It was placed on the windward side of the cupolas prior to louvering operation.

OBSERVATION: The plastic screen has proven highly successful in waterproofing the cupolas with no damage incurred by air conditioning units and hot water heater within the cupolas.

#### ITEM: Erecting Columns for Water Towers and Control Towers.

DISCUSSION: A potentially dangerous operation existed when erecting J2" x 12" columns for water towers and control towers. Construction was simplified when the columns were fabricated in the form of two (2) bents. Bracing was bolted with less difficulty, and, once the bent was erected, the columns were already plumb in one plane. After the bents were placed in position the bracing on the remaining two sides was installed quickly and efficiently.

OBSERVATION: A safer and quicker operation results when tall columns are erected in bents instead of individually.

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### SECTION 2, PART I, OBSERVATIONS (LESSONS LEARNED) (CONT'D)

#### ITEM: Application of Sealant to Earth Surface.

/2

DISCUSSION: In preparing an earth surface for MC-0, MC-2, Essoprime, or any other type of sealant, it is desirable to fine grade the entire area. However, during the Monsoon season, this is difficult to accomplish because of the frequent rain. It has been found advantageous to work small areas to grade and then shoot that surface with sealant.

There is, admittedly, a loss of grader efficiency working in this manner but, once this area is completed, the rain will not affect the surface. This in turn reduces hauling and grading effort required to rework the entire area after each rain.

OBSERVATION: Less efficient operation is generally one result of Monsoon rains. However, changes in construction techniques, like that above, have enabled progress to continue and project BODs to be met.

#### ITEM: Headwall Construction and Erosion

DISCUSSION: It was noted that standard U-shaped or flare-shaped headwalls had a tendency to erode behind the headwall, creating additional road and culvert maintenance problems. It was also found that when the headwalls were constructed above the road level, vehicles cutting the corner too sharply would damage the headwall to such an extent that major effort was required to repair them.

The 62d Engineer Battalion (Const) found that by constructing the culvert headwalls with staggered wingwall (See Inclosure #1) the water would flow more smoothly and little erosion would occur around the edge of the wingwalls.

To prevent vehicle damage the headwalls were constructed to road shoulder height using laterite-cement blocks. Sandbags were used on the slope from the top of the laterite block headwall to the edge of the road. This provided two additional benefits: first, vehicles turning the corner too sharply had a gentle sloped surface which would prevent damage to the vehicle, and second, the sandbagged slopes eliminated erosion of the road shoulder at the corners and behind the headwalls.

OBSERVATION: This method of constructing headwalls requires about the same effort as construction of sandbagged headwalls of the same size, but has a longer life and requires less maintenance. Erosion damage is reduced considerably. It is recommended that staggered headwalls be utilized by Engineer Units in the theater in order to reduce the amount of culvert maintenance and erosion.

#### ITEM: Concrete Chutes

DISCUSSION: When the 143d Engineer Detachment's batch plant became fully operational recently, Company A received the mission of constructing chutes

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SECTION 1, PART I, OBSERVATIONS (LESSONS LEARNED) (CONT'D)

for the 5 ton dump trucks to be used for hauling concrete. A hole was cut in the bottom center of a salvaged tailgate and then one-half of a round bomb container was welded perpendicular to the tailgate. It was found that the maximum distance the bomb container should extend from the tailgate was 30 inches in order to permit complete elevation of the dump body, which was often necessary to get all of the concrete out of the truck. An easily removable gate to control concrete flow was fitted on the outside of the tailgate and inside the circular bomb container. In order to prevent concrete from building up in the rear of the dump bed, a funnel was produced by welding steel plates from the mouth of the chute and extending them to the sides of the dump body at a 45° angle.

OBSERVATION: Field testing of these chutes found them to be excellent for placing concrete in small places such as foundation walls. It was also determined that, when placing concrete for large slabs, it is better to use the regular tailgate on the 5 ton dump truck and to dump directly into the pad. This method permitted placing of a stiffer mix and facilitated handling of the fresh concrete.

ITEM: Removing Tops of 55 Gallon Drums for Revelements

DISCUSSION: Company A recently received a task assignment which involved removing the tops from a large number of 55 gallon drums. The usual methods of cutting the tops out by hand or with a cutting torch proved to be too slow and time consuming. An expedient method was developed utilizing detonating cord. The empty drums were stood on end and about a foot of water was placed in each drum to absorb the shock when the lid was blown into the drum, and to prevent punctures in the bottom and sides. One strand of det-cord was then placed inside the rim of the drum on top of the drum lid. The det-cord was then tamped with two (2) inches of mud. Approximately three (3) feet of det-cord was left hanging over the edge of each drum so that all the drums could be tied into a ring main. A non-electric blasting cap with time fuse was then used to detonate the system.

OBSERVATION: The results obtained were excellent. A clean cut was made inside the rim of the drum. The lid was blown down into the drum and was easily removed by hand. This expedient method enabled A Company to remove lids from the drums at the rate of 25 to 30 per hour with a three man crew instead of five or six per hour utilizing the same size crew with cutting torches.

This expedient method of removing 55 gallon drum tops should be used when large numbers of topless drums are required. It is highly recommended for all units as an economic time and manpower saver.

ITEM: Replacement of Starter for the Joy 250 cfm Air Compressor

DISCUSSION: Because of a critical shortage of operational air compressors during the past month, extensive efforts were made to keep those compressors that were operational in good working condition. At the same time, additional effort was placed on trouble-shooting defective compressors. One of the

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SECTION 2, PART I, OBSERVATIONS (LESSONS LEARNED) (CONT'D)

results of this program was the discovery that a starter for multi-fuel engines FSN 2920-226-6545, can be used as a replacement starter for the Joy 250 cfm compressor, Model-RPV250DC-20.

**OBSERVATION:** It is recommended that the starter for multifuel engines FSN 2920-226-6545 be used as a replacement starter for the Joy 250 cfm compressor Model-RPV250DC-20, when the regular starter is not available.

Logistical problems discussed in Section 1 have not been fully resolved. These problems and their solutions will be further discussed in the next ORLL.

SECTION 2, PART II, RECOMMENDATIONS

1. The use of construction materials not provided by the supply system has created logistical and construction problems. The usually late arrival of such materials has caused construction delays. It is recommended that for projects requiring materials not in the supply system, or materials not commonly used in theater of operations construction, consideration be given to use of a civilian contractor, who generally has more ready access to the supplies and technical skills required. If this cannot be done, then special consideration must be given to design of projects to eliminate such materials, or acceptance of delayed construction phasing to allow adequate lead time for procurement of supplies.

2. In both an Engineer Construction Battalion and a Concrete Mixing and Paving Detachment large quantities of construction materials must be handled. To facilitate operation in these units it is recommended that an Engineer Construction Battalion be authorized one (1) each 10,000 pound fork lift, and that a Concrete Mixing and Paving Detachment (HQ) be authorized one (1) each 6,000 pound fork lift.

*Robert E. Crowley*

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ROBERT E. CROWLEY  
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EGB-3 (31 Jul 67)

1st Ind

SUBJECT: Operational Report - Lessons Learned (RCS CSPOR-65) for  
Quarterly Period Ending 31 July 1967

DA, HQ, 159th Engineer Group (Const), APO 96491      22 August 1967

THRU: Commanding General, 20th Engineer Brigade, APO 96491

TO: Commanding General, United States Army Engineer Command Vietnam (Prov),  
ATTN: AVCC-P&O, APO 96491  
Assistant Chief of Staff for Force Development, Department of the Army  
(ACSFOR-DA), Washington, D. C. 20310

1. The subject report, submitted by the 62nd Engineer Battalion (Const)  
has been reviewed by this headquarters and is considered comprehensive and  
of value for documentation and review of the reporting units activities  
and experiences.

2. This headquarters concurs with the submitted report, with the  
following comments:

a. Section I, paragraph 2, Subject: MOS Shortages: The shortages  
in the MOS listed by this unit are common to all construction battalions in  
the Group. Trained electricians are on critical shortage due to the large  
demand for wiring of both engineer troop and self-help construction.

b. Section I, paragraph 6, Subject: Materials Handling Equipment  
(MHE); and Section 2, Part II, Recommendations, paragraph 2: The requirement  
for additional MHE equipment or new equipment such as forklifts exists in all  
units of this Group due to the high volume of materials placed and the fact  
that the Logistical Depots do not have sufficient MHE to load engineer  
supplies out of the depots.

FOR THE COMMANDER:

s/ John L. Peel  
t/ JOHN L. PEEL  
1LT, CE  
Asst Adjutant

Copy furnished:  
CO, 62nd Engr Bn

13

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AVBI-OPN (31 July 67) 2nd Ind  
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for Quarterly  
Period Ending 31 July 1967

16

DA, Headquarters, 20th Engineer Brigade, APO 96491 1 September 1967

TO: Commanding General, USAECV(P), ATTN: AVCC-P&O, APO 96491

1. The subject report, submitted by the 62nd Engineer Battalion,  
159th Engineer Group, has been reviewed by this headquarters, and is con-  
sidered to be a comprehensive summary of the units activities during the  
reporting period.

2. This headquarters concurs with the submitted report as modified  
by the 1st Indorsement.

FOR THE COMMANDER:

Info copy:  
CO, 159th Engr Gp

s/Cecil D. Clark  
t/CECIL D. CLARK  
Major, CE  
Adjutant

14  
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AVCC-P&O (31 July 67) 3d Ind CPT Whitley/gdz/LBN 4391  
SUBJECT: Operational Report - Lessons Learned for the Quarterly Period  
Ending 31 July 1967

17

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND VIETNAM (PROV), APO 96491

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DH,  
APO 96375

This headquarters concurs with the 62nd Engineer Battalion ORLL report  
as written, subject to the following comments:

- a. Reference, Section 1, paragraph 2, page 2: The NCO shortages listed exist throughout the command.
- b. Reference, Section 1, paragraph 5(b), page 6: Concur. Shortages of specific construction materials are expected to continue to occur although this is being alleviated from supplies enroute. This headquarters prepares a 9-12 month forecast and bulk purchases to alleviate the shortage.
- c. Reference, Section 1, paragraph 5(c), page 6: Concur. This problem exists throughout the command, largely due to the necessity for packaging bulky building parts in separate boxes for ease of handling. Procedures are in effect to issue from depot stocks individual boxes, e.g., parts; however, in many cases local fabrication has proven to be an expedient solution.
- d. Reference, Section I, paragraph 5(e), page 7: Information provided by 1st Logistical Command indicates the following availability of critical equipment:
  - (1) Welding Shop - 21 each due for delivery from CONUS factory during 2Q FY68. There is no lift data available at this time. The bulk of welding shop sets will not be available until FY 69.
  - (2) Shop Equipment, Wood Working - No availability has been furnished by USAMEC on this item.
  - (3) Distributor, Water, 1000 gal - This item is slowly being shipped in limited quantities. The requirement for 2 each has been met for the 62nd Engineer Battalion from in-country assets.
  - (4) Pneumatic tool and compressor outfit, 250cfm, trailer mounted- USARPAC has requested USAMEC to expedite shipment of 250 cfm compressors which are available in CONUS. No reply has been received.
  - (5) Grader, motorized - There are 90 each available in CONUS ready

15

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AVCC-P&O (31 July 67)

3rd Ind

SUBJECT: Operational Report-Lessons Learned for the Quarterly Period  
Ending 31 July 1967

18

for immediate shipment. No lift data has been received.

(6) Crane shovel, 10-ton - This crane is being standardized by the 12½-ton crane which will not be available until March 1968.

(7) Grande, Truck mounted, 20-ton - None due in until March 1968. This item is on the closed loop support program.

(8) Intrenching machine - 63 each due for release from CONUS factory during 2Q FY68. No lift data has been furnished. \*

(9) Roller, motorized, 5-8 ton - No availability has been furnished by USAMEC on this item.

e. Reference, Section I, paragraph 5(f), page 7: An emergency MTOE was submitted to USARV G-3 for 10,000 lb rough terrain forklifts to be issued; one per combat battalion and two per construction battalion on 5 August 1967. These forklifts will be issued pending emergency MTOE approval. This will give each battalion an increased construction materials handling capability.

f. Reference, Section 2, Part II, paragraph 1, page 12: Studies are currently being made to standardize design criteria so that more accurate and realistic construction forecasts can be made.

FOR THE COMMANDER:

Info cys furn:

CG, 8th US Army, ATTN: Engr  
CG, 20th Engr Bde  
CO, 169th Engr Gp  
CO, 62nd Engr Bn

s/Paul A. Loop  
t/PAUL A. LOOP  
Colonel, CE  
Chief of Staff

16

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AVHGC-DST (31 Jul 67)

4th Ind

19 SUBJECT: Operational Report-Lessons Learned for the Period Ending  
31 July 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375 *8 Oct 1967*

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT,  
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 July 1967 from Headquarters, 62nd Engineer Battalion (Construction) (WC2B) as indorsed.

2. Pertinent comments follow:

a. Reference item concerning NCO and MOS shortages, page 2, paragraph 2, and 3d Indorsement, paragraph a: Concur.

(1) NCO shortages have existed throughout USARV for some time with no forecast of an appreciable change.

(2) Records maintained at this headquarters reflect shortages throughout the Engineer Command in the MOS's listed, and action has been taken to requisition up to the appropriate level within imposed ceilings. However, shortages projected for October in the cited MOS are not considered critical. For example, the Engineer Command is authorized 408 men with an MOS 52F20 and there is a projected shortage of 14 for all of October. The Engineer Command is taking steps to correct the total lack of that MOS in the 62d Engineer Battalion.

b. Reference item concerning shortage of TOE Equipment, page 7: Concur. The situation is improving and 3d Indorsement, paragraph d, shows that follow up is being conducted at all command levels. Lift data on available items is expected soon.

c. Reference item concerning emergency MTCE, page 12, paragraph 2, and 3d Indorsement, paragraph e. USARV message AVHGC-FD 59873 DTG 050830Z Sep was dispatched requesting 39 forklifts for engineer units. Engineer Command was information addressee.

3. Unit will be notified of actions and comments by routine indorsement which returns this report.

FOR THE COMMANDER:

*Lester J. Shultz*  
Lester J. Shultz  
Major, AGC  
USARV

1 Incl  
nc

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GPOP-DT (31 Jul 67)

5th Ind

SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967  
from HQ, 62d Engineer Battalion (UIC: WCWXAA)(RCS CSFOR-65)

20

HQ, US ARMY, PACIFIC, APO San Francisco 96558 15 NOV 1967

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

1. This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed.

2. Reference paragraph 2c, 4th Indorsement. By CINCUSARPAC message GPOP-FD 31867, DTG 130310Z Sep 67, request for emergency issue of forklifts was submitted to DA. No reply has been received to date.

FOR THE COMMANDER IN CHIEF:



K. F. OSBOURN  
MAJ, AGC  
Asst AG

1 Incl  
nc

18 Protective marking is cancelled  
when separated from protected  
material.

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ROADWAY

WATER FLOW

LATERITE RACKS  
CASTED w/ CONC.

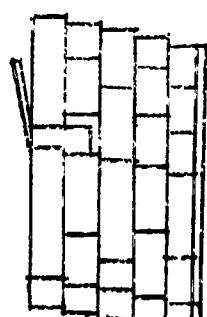
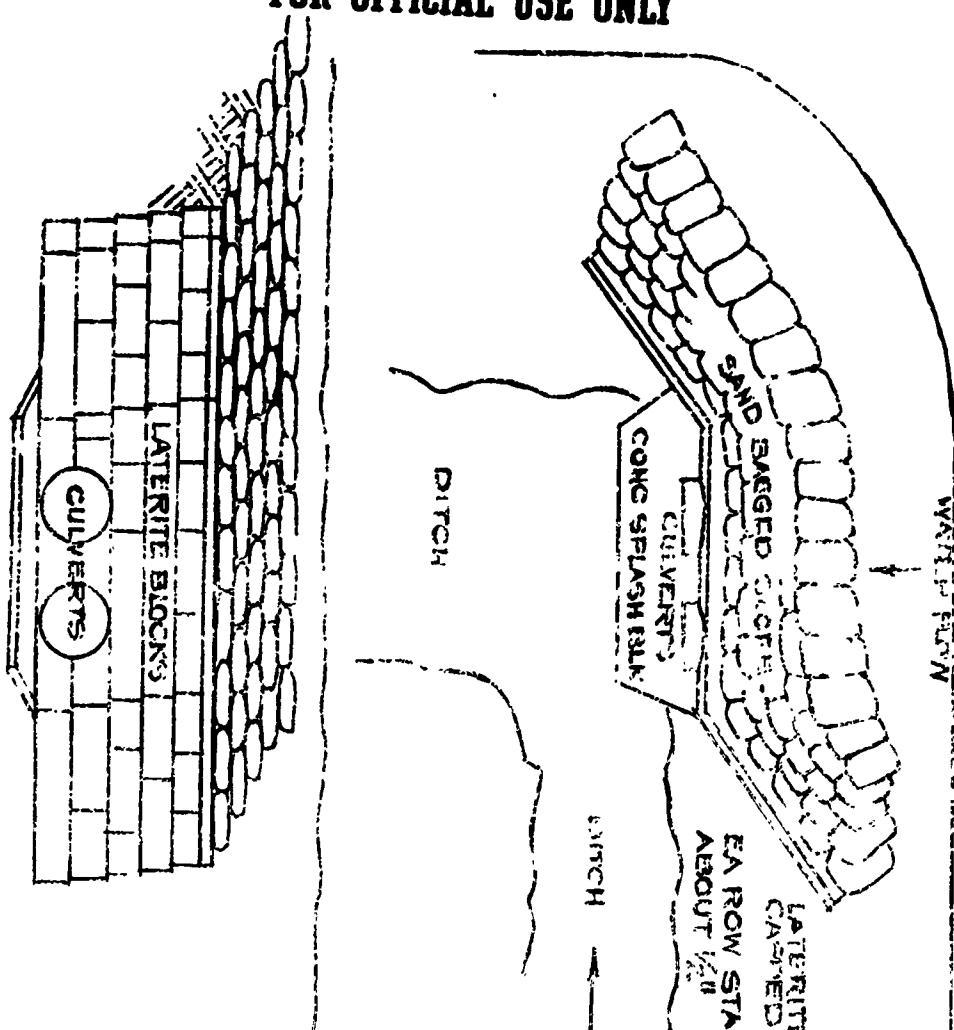
EA ROW STAGGERED  
ABOUT  $\frac{1}{2}$ "

CULVERTS  
CONC SPLASH TRAY

DITCH — WATER FLOW

DITCH

ROADWAY



COMPACTED  
BACKFILL

Incl #1

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